UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6,895,081 B1
APPLICATION NO. : 09/294563
DATED : May 17, 2005
INVENTOR(S) : Kurt E. Schmidt, David J. Groessl and Yun Zhang

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Specification:

Column 4, line 62, delete "Appendix" and insert therefore --Table--

Column 5, before line 1 insert:

--**Table 1**

f_i:
150, 600, 1050, 1500, 1950, 2400, 2850, 3300, 3750, 4200, 4650, 5100, 5550, 6000, 6450, 6900, 7350, 7800, 8250, 8700, 9150, 9600, 10050, 10500, 10950, 11400, 11850, 12300, 12750, 13200, 13650, 14100, 14550, 15000, 15450, 15900, 16350, 16800, 17250, 17700, 18150, 18600, 19050, 19500, 19950.

N:
1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70, 73, 76, 79, 82, 85, 88, 91, 94, 97, 100, 103, 106, 109, 112, 115, 118, 121, 124, 127, 130, 133 respectively.

ψ_i:
5.9738, 1.3564, 2.4683, 4.8575, 4.7434, 2.2972, 4.6015, 1.9156, 2.5660, 4.5986, 4.6452, 3.4542, 3.6341, 0.8848, 4.3410, 2.1606, 4.2342, 4.2147, 3.1058, 5.909, 5.2782, 5.1159, 5.4354, 5.6124, 0.5751, 3.8940, 3.3812, 6.0230, 2.3239, 2.7284, 4.8032, 4.1488, 2.3427, 4.6362, 0.9163, 2.9335, 1.0363, 2.3272, 3.2040, 4.0025, 2.0028, 5.8444, 2.4525, 1.4760, 1.770 --

Column 5, line 67 delete "Appendix" and insert therefore --Table--.

Column 6, line 1 delete "Appendix" and insert therefore --Table--.

Column 6, following line 3, insert:

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--Table 2

30Hz Raw Measurements:
Ytr(30) – Admittance tip-to-ring measured at 30Hz
Ytg(30) – Admittance tip-to-ground measured at 30Hz
Yrg(30) – Admittance ring-to-ground measured at 30Hz

30Hz Derived Measurements:
30Gtr – Conductance tip-to-ring measured at 30Hz = real(Ytr(30))
30Str – Susceptance tip-to-ring measured at 30Hz = imag(Ytr(30))
30Gtg – Conductance tip-to-ground measured at 30Hz = real (Ytg(30))
30Stg – Susceptance tip-to-ground measured at 30Hz = imag(Yt(30))
30Ctr – Capacitance tip-to-ring measured at 30Hz = Str(30)/(2*pi*30)
30Ctg – Capacitance tip-to-ground measured at 30Hz = St(30)/(2*p_i*30)
Lmeas – Length in kft measured at 30Hz = 30Ctg/17.47

150Hz-20KHz Raw Measurements:
Ytr(f) – Admittance tip-to-ring where f=150Hz,600Hz, 1050Hz, 1500Hz,... 19950Hz
Ytg(f) – Admittance tip-to-ground where = 150Hz, 600Hz, 1050Hz, 1500Hz.... 19950Hz
Yrg(f) – Admittance ring-to-ground where f= 150Hz, 600Hz, 1050Hz, 1500Hz,... 19950Hz

150Hz-20KHz Derived Measurements:
150Gtr – Conductance tip-to-ring measured at 150HZ = real(Ytr(150))
600Gtr – Conductance tip-to-ring measured at 600Hz = real(Ytr(600))

19950Gtr – Conductance tip-to-ring measured at 19950Hz = real Ytr(19950))

150Str – Susceptance tip-to-ring measured at 150Hz = imag(Ytr(150))
600Str – Susceptance tip-to-ring measured at 600Hz = imag(Ytr(600))

19950Str – Susceptance tip-to-ring measured at 19950Hz = imag(Ytg(19950))

150Gtg – Conductance tip-to-ground measured at 150Hz = real(Ytg(150))
600Gtg – Conductance tip-to– ground measured at 600Hz = real (Ytg(600)

19950Gtg – Conductance tip-to-ground measured at 19950Hz = real (Ytg(19950))

150Stg – Susceptance tip-to-ground measured at 150Hz = imag(Ytg(150))
600Stg – Susceptance tip-to-ground measured at 600Hz = imag(Ytg(600))

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19950Stg – Susceptance tip-to-ground measured at 19950Hz = imag(Ytg(19950))

150Ctr – Capacitance tip-to-ring measured at 150Hz = 150Str/(2*pi*150)
600 Ctr – Capacitance tip-to-ring measured at 600Hz = 600Str/(2*pi*600)

19950Ctr – Capacitance tip-to-ring measured at 19950Hz = 9950Str/(2*pi*19950)

150Ctg – Capacitance tip-to-ground measured at 150Hz = 150Stg/(2*pi*150)
600Ctg – Capacitance tip-to-ground measured at 600Hz = 600Stg/(2*pi*600)

19950Ctg – Capacitance tip-to-ground measured at 19950Hz = 19950Stg/(2*pi*19950)

150Hz-20KHz Secondary Derived Measurements:
C30/C4K – Ratio of tip-to-ground Capacitance at 30Hz to 4200Hz
C4K/C10K – Ratio of tip-to-ground Capacitance at 4200Hz to 10050Hz
Cslope – Tip-to-ground Capacitance ratio slope = (C4K/C10K)/(C30/C4K)
C30-C4K – Difference in tip-to-ground Capacitance at 30Hz and 4200Hz
C4K-C10K – Difference in top-to-ground Capacitance at 4200Hz and 10050Hz
Cdelta– Tip-to-ground Capacitance difference delta = (C4K-C10K)/(C30-C4K)

G4K-G30 – Ratio of tip-to-ground Conductance at 4200Hz and 30Hz
G10K-G4K – Ratio in tip-to-ground Conductance at 10050Hz and 4200Hz
Gslope– Tip-to-ground Conductance ratio slope = (G10K/G4K)/(G4K/G30)
G4K-G30 – Difference in tip-to-ground Conductance at 30Hz and 4200Hz
G10K-G4K – Difference in tip-to-ground Conductance at 4200Hz and 10050Hz
Gdelta – Tip-to-ground Conductance difference delta = (G10K-G4K)/(G4K-G30)

C30/G30 – Ratio of Tip-to-ground Capacitance to Conductance at 30Hz
C30/G4K – Ratio of Tip-to-ground Capacitance at 30Hz to Conductance at 4200Hz
C4K/G4K – Ratio of Tip-to-ground Capacitance to Conductance at 4200Hz

Gtr_dmax – Maximum positive slope of Gtr(f) = max(derivative(Gtr(f)/df))
Gtr_fmax – Frequency at which Gtr_dmax occurs
Gtr_dmin – Maximum negative slope of Gtr(f) = min(derivative(Gtr(f)/df))
Gtr_fmin – Frequency at which Gtr_dmin occurs
Gtr_fpk – Frequency of first peak (local maxima)in Gtr(f)
Gtr-fval – Frequency of first valley(local minima)in Gtr(f)
Gtr_d_delta – Gtr Max/Min Derivative difference = Gtr_dmax-Gtr_dmin
Gtr_pk_delta – Gtr peak/valley frequency difference = Gtr_fval-Gtr_fpk
Gtr_pk – Value of Gtr(f) at frequency Gtr_fpk
Gtr_val – Value of Gtr(f) at frequency Gtr_fval
Gtr_delta – Gtr peak/valley difference = Gtr_pk-Gtr_val

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Gtg dmax – Maximum positive slope of Gtg(f) = max(derivative(Gtg(f)/df))
Gtg_fmax – Frequency at which Gtg_dmax occurs
Gtg dmin – Maximum negative slope of Gtg(f) = min(derivative(Gtg(f)/df))
Gtg_fmin – Frequency at which Gtg_dmin occurs
Gtg_d_delta – Gtg Max/Min Derivative difference = Gtg_dmax-Gtg_dmin

Ctr_dmax – Maximum positive slope of Ctr(f) = max(derivative(Ctr(f)/df))
Ctr_fmax – Frequency at which Ctr_dmax occurs
Ctr_dmin – Maximum negative slope of Ctr(f) = min(derivative(Ctr(f)/df))
Ctr_fmin – Frequency at which Ctr_dmin occurs
Ctr_fpk – Frequency of first peak (local maxima)in Ctr(f)
Ctr_fval – Frequency of first valley(local minima)in Ctr(f)
Ctr_d_delta – Ctr Max/Min Derivative difference = Ctr_dmax-Ctr_dmin
Ctr_pk_delta – Ctr peak/valley frequency difference = Ctr_fval-Ctr_fpk
Ctr_val – Value of Ctr(f) at frequency Ctr_fval

Ctg_dmax – Maximum positive slope of Ctg(f) = max(derivative(Ctg(f)/df))
Ctg_fmax – Frequency at which Ctg_dmax occurs
Ctg_dmin – Maximum negative slope of Ctg(f) = min(derivative(Ctg(f)/df))
Ctg_fmin – Frequency at which Ctg_dmin occurs
Ctg_d_delta – Ctg Max/Min Derivative difference = Ctg_dmax-Ctg_dmin

Str_dmax – Maximum positive slope of Str(f) = max(derivative(Str(f)/df))
Str_fmax – Frequency at which Str_dmax occurs
Str_dmin – Maximum negative slope of Str(f) = min(derivative(Str(f)/df))
Str_fmin – Frequency at which Str_dmin occurs

150Hz-20Hz Secondary Derived Measurements:
Str_fpk – Frequency of first peak (local maxima)in Str(f)
Str_fval – Frequency of first valley(local minima)in Str(f)
Str_d_delta – Str Max/Min Derivative difference = Str_dmax-Str_dmin
Str_pk_delta – Str peak/valley frequency difference = Str_fval-Str_fpk
Str_pk – Value of Str(f) at frequency Str_fpk
Str_val – Value of Str(f) at frequency Str_fval
Str_delta – Str peak/valley difference = Str_pk_Str_val

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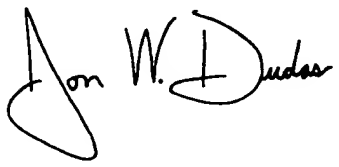
Stg_dmax – Maximum positive slope of Stg(f) = max(derivative (Stg(f)/df))
Stg_fmax – Frequency at which Stg_dmax occurs
Stg_dmin – Maximum negative slope of Stg(f) = min(derivative (Stg(f)df))
Stg_fmin – Frequency at which Stg_dmin occurs
Stg_fpk – Frequency of first peak (local maxima)in Stg(f)
Stg_fval – Frequency of first valley(local mixima)in Stg(f)
Stg_d_delta – Stg Max/Min Derivative difference = Stg_dmax-Stg_dmin
Stg_pk_delta – Stg peak/valley frequency difference = Stg_fval-Stg_fpk

Gtg20k/Gtg8k – Ratio of Gtg at 19950Hz and 8250Hz
Gtg20k/Gtg4k – Ratio of Gtg at 19950Hz and 4200Hz
Cgt30/Cgt20k – Ratio of Ctg at 30Hz and 19950Hz
Cgt30/Cgt8k – Ratio of Ctg at 30Hz and 8250Hz--

Signed and Sealed this

First Day of January, 2008



JON W. DUDAS
Director of the United States Patent and Trademark Office